

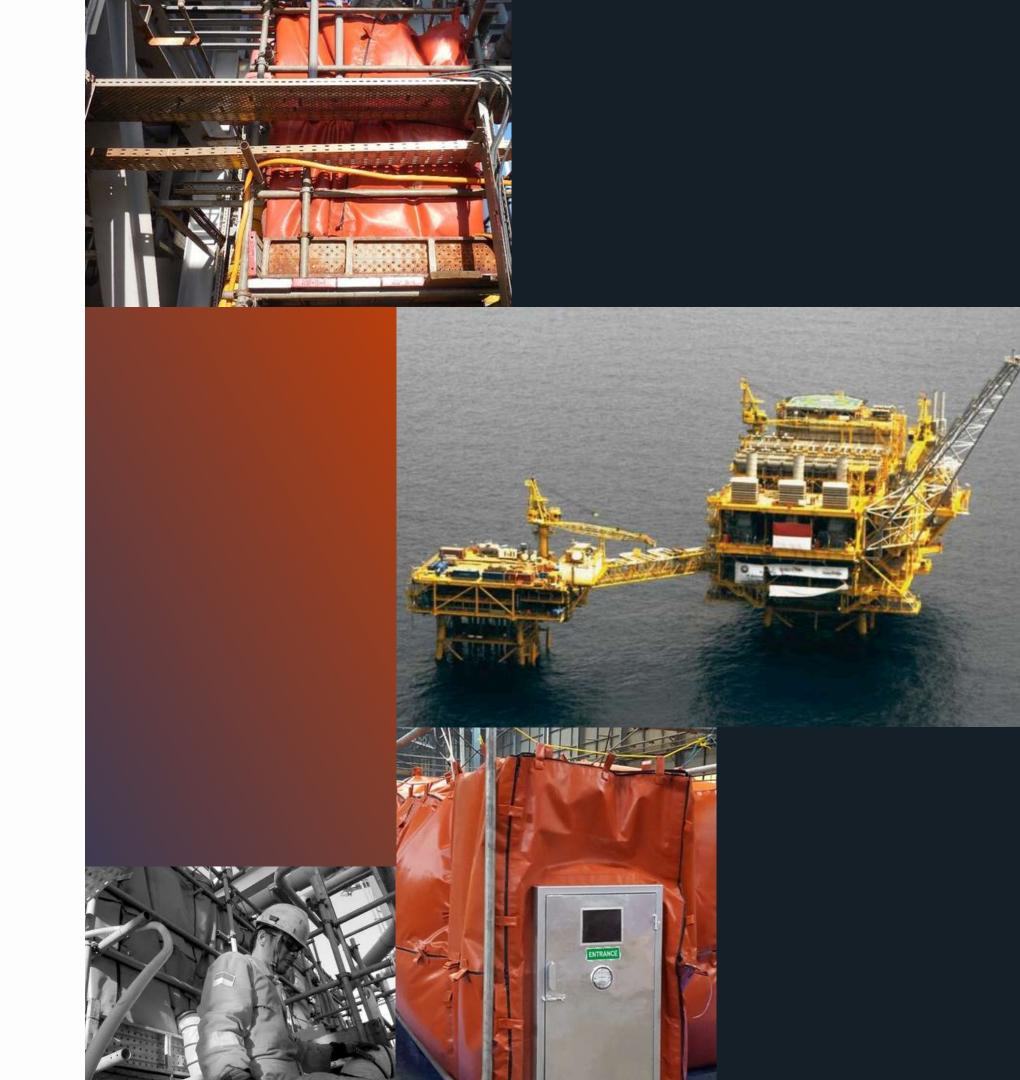
WELDING CHAMBER HABITAT

AUTOMATIC GAS DETECTION SYSTEM





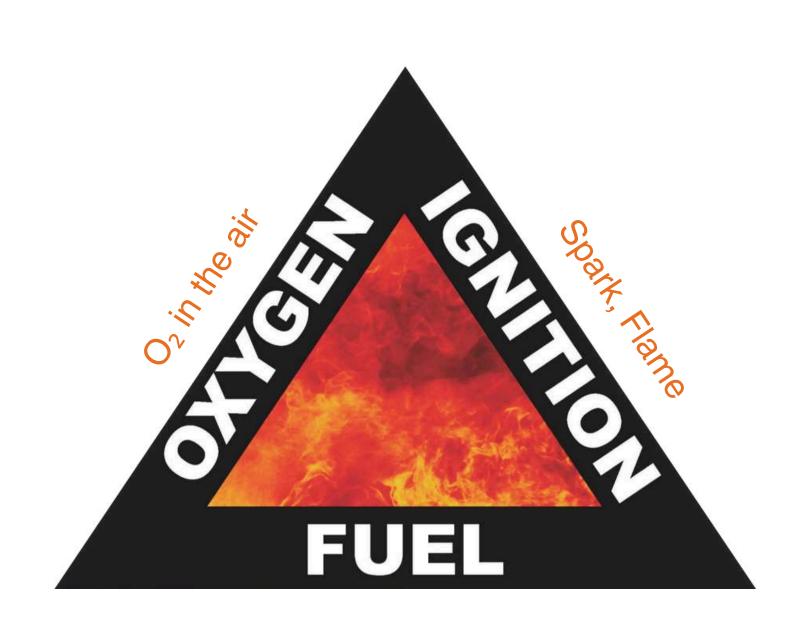




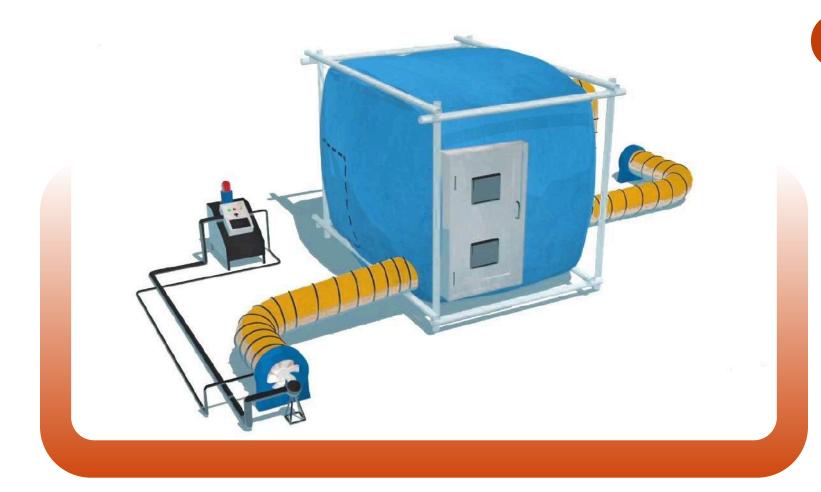
Combustion Fire Triangle

A Fire Triangle is a well known educational tool for understanding and preventing fires

- If the fire triangle is complete, a fire will occur
- Therefore, preventing one of the situational factors will prevent a fire
- In many cases, requirements will often regard preventing fires



Hydrocarbon gases



Combustion Control

Operational Controls

- Permit to work system
- Facility gas detection systems

Welding Chamber Controls

- Habitat integrity
- Manometer
- Automatic gas detection and shutdown unit
- Personal gas detectors





About the Company

Moners Creative offers clients a pressurized welding chamber or welding habitat as a common platform solution that allows hot work to be conducted on a hydrocarbon live facility. This will result in safer, more efficient, and more cost-effective alternatives to current industry practices.





Short or Long-term **rental of pressurized welding chamber habitats** for use offshore or onshore



Supply fully trained pressurized welding chamber habitats offshore personnel



Alternatively, we can **customized training programs** to support your personnel, ensuring the competency and efficiency of your pressurized welding chamber requirements

Welding Chamber Habitat

The basic standard kit is 2m long x 2m wide x 2m high covering 8 meter cubic comprising of ten panels a pneumatic fan & ducting

Designed for use in potentially explosive atmospheres - Zones 1 & 2

Modular design - zips together forming many sizes and shapes

Positively pressurized using a pneumatic driven fan

No power or hand tools to assemble the pressurized welding chamber

All the component parts are lightweight

Gas detection and shutdown unit (optional)

Certified Welding Chamber





Fire proof panels, Testing Certificate by SUCOFINDO Lab. (Burning Test Method BS476 Part 7 and Tensile Test Method ASTM D638) and Field Testing (Burning Test & Grindstone Test)



Domestic Component Level (TKDN)
certified Welding Chamber Unit
(WCU) in according with
government business requirements

Welding Chamber Habitat Pressure

Time for one change

Air change rate

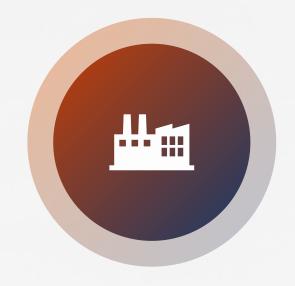
| Habitat Size LxWxH | Habitat Volume m³ | Fan Flow Rate (m³/sec) | In seconds | In minutes | per minute | per hour |
|-----------------------|-------------------------|------------------------------|---------------|---------------|---------------|-------------|
| 1x1x2 | 2 | 0.75 | 2.67 | 0.04 | 22.50 | 1350.00 |
| 1x2x2 | 4 | 0.75 | 5.33 | 0.09 | 11.25 | 675.00 |
| 3x1x2 | 6 | 0.75 | 8.00 | 0.13 | 7.50 | 450.00 |
| 2x2x2 | 8 | 0.75 | 10.67 | 0.18 | 5.36 | 337.50 |
| 3x2x2 | 12 | 0.75 | 16.00 | 0.27 | 3.75 | 225.00 |
| 2x4x2 | 16 | 0.75 | 21.33 | 0.36 | 2.81 | 168.75 |
| 3x3x2 | 18 | 0.75 | 24.00 | 0.40 | 2.50 | 150.00 |
| 2x5x2 | 20 | 0.75 | 26.67 | 0.44 | 2.25 | 135.00 |
| 3x4x2 | 24 | 0.75 | 32.00 | 0.53 | 1.88 | 112.50 |
| 3x5x2 | 30 | 0.75 | 40.00 | 0.67 | 1.50 | 90.00 |
| 4x4x2 | 32 | 0.75 | 42.67 | 0.71 | 1.41 | 84.38 |
| 4x5x2 | 40 | 0.75 | 53.33 | 0.89 | 1.13 | 67.50 |

Note: Rates may vary depending on length of air in-take and out-take hoses

Pressurized Welding Chamber System is typically used for



Installation and tie-in of new pipe work for Brownfield Development and Campaigns



Installation of new structural supports and skids for platform/plant upgrades



Repair of critical plant and equipment, cable splicing and housing non-EX equipment



Repair of Process
Vessels where internal
entry is required

Easy to Customize and Adaptable



Modular zip-fit panel design which can be customized and adapted to fit around pipes and other penetrations where the challenge is to create a safe module in hazardous area



Simple Setup

One person can install a small habitat and installed in under one working shift



Multiple Deployment

Can be dismantled and re-erected as the work progresses





Waste Management

Eliminates the waste disposal of scrap materials (the materials are reusable)



Cost-saving Advantages

Providing a cost-effective solution for your welding needs without compromising on quality



Material's Functionality

Panels are fire proof, interchangeable and can accomodate more than one task

Welding Chamber Habitat Benefits



Pressurized Welding Chamber
Systems offer a cost-effective
solution that increases efficiency
and provides numerous HSE
benefits





This addresses the challenge of creating a safe workplace wherever hot work in hazardous areas in performed



Automatic Shutdown System



Evolved and Innovated Gas Detection Unit

- > Integrated Mobile Gas Detection unit with automatic shutdown system
- ➤ Remote gas sensors set at 5% LEL Methane and H₂S
- Simple design and fast alerts, this device keeps workspace safe with minimal effort
- > The evolution from gen 1 and gen 2 into an integrated, lightweight, and portable gas detection unit (gen 3)









gen 1

gen 2

gen 3

Certified Axial Fan



Components











Blower Panel

Fireproof



Window Panel



Hanger



Outlet Blower Electric and Pneumatic

Spiral Hose

Aluminium Door 2x1

Personal Gas Detector



Note: Pictures and Components are subject to change for improvement without notice

WELDING CHAMBER HABITAT







PROJECT REFERENCES

| LIST | END USER/CUSTOMER | PROJECT | TYPES OF PRODUCTS SUPPLIED |
|------|--------------------------------|--|--|
| 1 | MEDCO E&P NATUNA LTD (ex COPI) | ISOLATION HOT WORK (HARZADOUS AREA) | WELDING CHAMBER UNIT (HABITAT) |
| | | STRUCTURE STEEL | SMOKING SHELTER |
| | | PIPE LINE | PIPE FITTINGS & VALVE CS/SS316, PVC & CPVC |
| | | MAN POWER | TECHNICIAN HABITAT & SPV.PIPING |
| 2 | PREMIER OIL | ISOLATION HOT WORK (HARZADOUS AREA) | WELDING CHAMBER UNIT (HABITAT) & ACCESSORIES |
| 3 | MELU BANGUN WIWEKA | ISOLATION HOT WORK (HARZADOUS AREA) | WELDING CHAMBER UNIT (HABITAT) & ACCESSORIES |
| 4 | PETRA ENERGY INTERNATIONAL | ISOLATION HOT WORK (HARZADOUS AREA) | WELDING CHAMBER UNIT (HABITAT) & ACCESSORIES |
| 5 | ARMADA GEMA NUSANTARA (HCML) | ISOLATION HOT WORK (HARZADOUS AREA) | WELDING CHAMBER UNIT (HABITAT) & ACCESSORIES |
| | | MAN POWER | TECHNICIAN HABITAT |



OFFICE & WORKSHOP

Jl. Cut Mutia No. 30, Kel. Margahayu, Kec. Bekasi Timur, Kota Bekasi, Bekasi 17113



021-8267-8110



0813-1630-2678



info@monerscreative.com



monerscreative.com